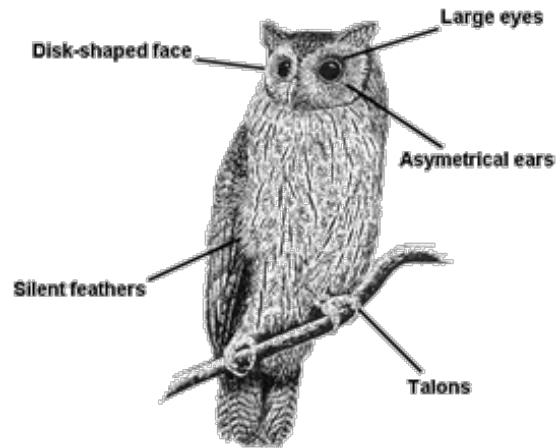


Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Animal Adaptations

Animals are adapted to live in certain habitats, to avoid predators, to hunt/find food, to defend territory and to attract mates. The owl and its many adaptations is the focus of the Animal Adaptations Course. During the "owl pellet dissection" students compare and contrast the adaptations of owls with other animals. Through a discussion of habitats and ecological niches, students realize how certain adaptations may give a species an advantage in the constant game of survival. Students will even have the opportunity to create a rock owl to take back home.



Why can owls turn their heads over 270 degrees?

According to legend, is an owl a good or bad omen?

What has a better range of hearing: an owl or a human?

If an owl "throws up" is it sick?

North Carolina Essential Standards Correlations:

1st Grade - Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
- 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering.)

4th Grade - Science

- 4.L.1.1 Give examples of changes in an organism's environment that are beneficial to it and some that are harmful.
- 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.
- 4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Bat Ecology

Bats have long been the object of fascination, mystery and superstition. This is largely because bat activities are restricted mostly to twilight and darkness. When bats are seen it is in dim evening light. This natural behavior has made bats the subject of misunderstanding and prejudice.

What do bats eat? The majority of bats are insectivorous; these small bats can eat 2,000 insects every night. Can you imagine a world without bananas? In this class students will investigate bat adaptations, myths and the crucial role that bats play in the world's ecosystems.

North Carolina Essential Standards Correlations:

1st Grade Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
- 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering.)

2nd Grade Science

Summarize the life cycle of animals:

- Birth
- 2.L.1.1 - Developing into an adult
- Reproducing
- Aging and death

4th Grade - Science

- 4.L.1.1 Give examples of changes in an organisms environment that are beneficial to it and some that are harmful.
- 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.
- 4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

5th Grade - Science

- 5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).
- 5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

6th Grade - Science

- 6.L.2.1 Summarize how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within food chains and food webs (terrestrial and aquatic) from producers to consumers to decomposers.

8th Grade - Science

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

- 8.L.3.1 Explain how factors such as food, water, shelter and space affect populations in an ecosystem.
- Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including: - Coexistence and cooperation
- 8.L.3.2 - Competition (predator/prey)
- Parasitism
- Mutualism

High School Biology

- Bio.2.1.1 Analyze the flow of energy and cycling of matter (water, carbon, nitrogen and oxygen) through ecosystems relating the significance of each to maintaining the health and sustainability of an ecosystem.
- Bio.2.1.2 Analyze the survival and reproductive success of organisms in terms of behavioral, structural and reproductive adaptations.
- Bio.2.1.3 Explain various ways organisms interact with each other (including predation, competition, parasitism, mutualism) and with their environments resulting in stability within ecosystems.
- Bio.2.2.1 Infer how human activities (including population growth, pollution, global warming, burning of fossil fuels, habitat destruction and introduction of nonnative species) may impact the environment.
- Bio.2.2.2 Explain how the use, protection and conservation of natural resources by humans impact the environment from one generation to the next.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Bugs

Students get the chance to learn about and observe the basic characteristics that set bugs apart from other species in the animal kingdom. Through scavenger hunts, games, songs and bug hunts students will learn about the different adaptations which have enabled bugs to survive for thousands of years.

North Carolina Essential Standards Correlations:

1st Grade Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

2nd Grade Science

- 2.L.1.1 Summarize the life cycle of animals: - Birth - Developing into an adult - Reproducing - Aging and death
- 2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Evening Programs

Night time is what makes field trips to SEEC so much fun. After eating a big dinner with your friends, we like to wrap up our days with an evening event guaranteed to make memories.

Campfires

Come sit down next to the original TV set: the flickering flames of a campfire. We'll tell a few jokes, sing some catchy songs and maybe roast a marshmallow as we wind down our day. You'd be surprised how many students have never experienced the magic of a campfire, so be sure to request one on your next SEEC overnight.

North Carolina Essential Standards Correlations:

4th Grade Music

- 4.ML.1.1 Apply expressive qualities when singing or playing a varied repertoire of music representing genres and styles from diverse cultures.
- 4.ML.1.2 Execute the performance of vocal ostinatos, partner songs, counter-melodies and rounds in two or more parts.

5th Grade Music

- 5.ML.1.1 Illustrate independence and accuracy while singing and playing instruments within a group or ensemble.
- 5.ML.1.2 Illustrate blending vocal timbres, matching dynamic levels, and responding to the gestures of a conductor while singing in groups.

7th Grade Music

- 7.ML.1.1 Use developing tone and discriminating pitch when performing music.
- 7.ML.1.3 Use expressive elements (such as accents, attacks, releases and interpretation), while singing and/or playing a varied repertoire of music.
- 7.MR.1.1 Execute specific gestures of a conductor in response to the various elements of music (such as meter, dynamics, phrasing, etc.).

8th Grade Music

- 8.ML.1.1 Use characteristic tone and consistent pitch when performing music alone and collaboratively, in small and large ensembles, using a variety of music.
- 8.ML.1.3 Interpret expressive elements, including dynamics, timbre, blending, accents, attacks, releases, phrasing, and interpretation, while singing and/or playing a varied repertoire of music with technical accuracy.
- 8.MR.1.1 Interpret the gestures of a conductor when singing or playing an instrument.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Night Hikes

No need for a flashlight for this evening activity; just your sense of adventure! A SEEC Night Hike is a relaxing excursion into the misunderstood world of frogs, toads, owls, bats, spiders, deer and other fascinating nocturnal creatures. Night Hikers will have an evening full of fun, informative and 'eye-opening' activities. Students will learn to appreciate the darkness and become more in-tune with their own special adaptations for dealing with the dark.

North Carolina Essential Standards Correlations:

4th Grade Science

4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.

6th Grade Science

6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight, and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Predator/Prey

Fox/ Bobcat/Rabbit is a game that simulates the basic ecological principals of predator/prey relationships. In this game students become foxes, rabbits and Bobcats. Rabbits are the primary consumers the foxes are secondary consumers and bobcats are the top predators. At the end of the game we discuss population dynamics, mutual dependence and examine how overpopulation by a species impacts the environment.

North Carolina Essential Standards Correlations:

4th Grade Science

- 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.
- 4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

5th Grade Science

- 5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).
- 5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

8th Grade Science

- 8.L.3.1 Explain how factors such as food, water, shelter and space affect populations in an ecosystem.
- 8.L.3.2 Summarize the relationships among producers, consumers and decomposers including the positive and negative consequences of such interactions including: - Coexistence and cooperation - Competition (predator/prey) - Parasitism - Mutualism
- 8.L.3.3 Explain how the flow of energy within food webs is interconnected with the cycling of matter (including water, nitrogen, carbon dioxide and oxygen).

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Nature Hikes

With over 300 acres to explore at The Summit Environmental Education Center at Haw River State Park, SEEC offers a variety of relaxing and educational nature hikes, walks and tours. We can stroll down to the boardwalk that meanders through scenic wetlands and meets up with the Haw River. We can also take more structured hikes that provide unique educational opportunities for groups of all ages.

No matter what your plans are for your time here, SEEC strongly encourages you to take a break and refresh yourself with a stroll through the park. Trail maps are available at the front desk.

North Carolina Essential Standards Correlations:

1st Grade Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

3rd Grade Science

Remember the function of the following structures as it relates to the survival of plants in their environments:

- 3.L.2.1
 - Roots – absorb nutrients
 - Stems - provide support
 - Leaves- synthesize food
 - Flowers - attract pollinators and produce seeds for reproduction.
- 3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.
- 3.L.2.3 Summarize the distinct stages of the life cycle of seed plants.
- 3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine the ability of soil to support the growth and survival of many plants.

5th Grade Science

- 5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers(biotic factors).
- 5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Professor Hikes

Students become the experts in this trail-based teaching activity. Each student is selected to teach interesting facts to other students on this 45 minute long walk in the woods. Once we're finished teaching each other, we'll go a little further by reviewing what we've learned and exploring more of the park.

Hansel and Gretel Hikes

This activity is one of our best. A SEEC instructor places clues, inspirational quotes and simple activities -- with guide arrows -- along one of our picturesque trails. Group members then follow the 'breadcrumbs' and experience the wonder of the woods through their own personalized hike.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

SEEC Jeopardy!

This... Is... Jeopardy... with your host, the Summit Environmental Education Center! With categories based on our courses, this interactive learning game is a perfect review of your field trip. Students work together in teams to correctly answer a variety of challenging questions presented in the traditional, but not conventional Jeopardy format. Just remember to phrase your answers in the form of a question.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Soils Investigations

With this SEEC course, it is time to get your hands dirty. Students today are rarely given the opportunity to really investigate soils in a natural environment. SEEC wants to change that.

Soil is an integral part of every ecosystem. Soil helps regulate water flow, sustains plant and animal life, filters potential pollutants, assists in the cycling of nutrients and supports structures. There are many types of soils, all with a variety of properties which allow them to perform a variety of functions.

Students will study the importance of soil, how it is made and its many properties, while going on a soil scavenger hunt, visiting a soil pit, and using clay to create a product with their own hands.

North Carolina Essential Standards Correlations:

1st Grade Science

- 1.L.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils and water that make them useful in different ways.
- 1.L.2.2 Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants.

3rd Grade Science

- 3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.
- 3.L.2.4 Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine the ability of soil to support the growth and survival of many plants.

6th Grade Science

- 6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.
- 6.L.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship.
- 6.L.2.5 Summarize how the abiotic factors (such as temperature, water, sunlight, and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.

High School Earth/Environmental Science

- EEn.2.1.3 Explain how natural actions such as weathering, erosion (wind, water and gravity), and soil formation affect Earth's surface.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Orienteering

Get lost! In this SEEC course, that's exactly what we'll do. Easily integrated into units on Geography, Math and Science, our orienteering program is a great way to teach participants basic map, compass and survival skills. Participants will navigate from one point to several others through Haw River State Park. It's like a big scavenger hunt in the woods, but so much more! Students face mental challenges, learn lifetime skills, exercise and have loads of fun tromping on our trails.

Navigation is the core of orienteering and it takes time to master. But participants will be well on their way after this challenging class. So grab your map, your compass and your sense of adventure. Prepare to step 'outside of the box' and into the world of Orienteering as only SEEC would teach it!

A special Night Orienteering Course is available upon request!

North Carolina Essential Standards Correlations:

4th Grade Science

- 4.P.1.1 Explain how magnets interact with all things made of iron and with other magnets to produce motion without touching them.

6th Grade Science

- 6.E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density.

Pictures of students enjoying the Summit Environmental Education Center (SEEC) orienteering course

The class begins by letting the students get comfortable with reading, using and orienting a map. They will also be introduced to the terminology and equipment necessary for orienteering.



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Students will form small groups and follow one of ten orienteering courses created on the park property. Each course uses a variety of compass bearings and clues to move the group through the course.



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Teambuilding

Have you or your students ever had to cross a chocolate river or sneak through a giant spider web? Come to SEEC and you might have to do both!

Whether you want your students to bond in the fall or to end the school year on a high note, SEEC's teambuilding program which includes a challenge course, is the perfect program for you.

Teambuilding refers to all activities, games, initiatives and elements involved in helping participants learn teambuilding skills. At SEEC, we put together individualized programs that fit the needs of each group. We have adapted, created and customized over 100 games, initiatives and low ropes elements - each tailored to meet the specific needs of your students. Our experienced SEEC facilitators will take your group on a journey they will never forget. Each person will learn more about him/herself and will form an unbreakable bond with their teammates.

Bonding is an important element for all groups. SEEC can lead ice-breakers, goofy games, walks, hikes, discussions and Challenge Course sessions for as little as two hours and for as long as one week.

SEEC's teambuilding is also the perfect addition to any conference. Activities can be scheduled in 2-hour time blocks and are guaranteed to get your group thinking outside the box.

To schedule a detailed teambuilding session with us, contact SEEC by phone or email at your earliest convenience. Be ready to answer the following questions:

What do you want out of your teambuilding session? Better communication skills. A sense of group identity. A break from your conference. Breaking down of barriers/cliques.

How much time can you schedule for your teambuilding session?

How many participants? Do you want them in large groups? Small groups? Rotations?

North Carolina Essential Standards Correlations:

2nd Grade Healthful Living

- 2.ICR.1.1 Classify behaviors as helpful or hurtful to friendships.
- 2.ICR.1.2 Interpret the feelings of others and how to respond when angry or sad.
- 2.ICR.1.3 Explain why it is wrong to tease others.

3rd Grade Healthful Living

- 3.ICR.1.2 Plan how to show compassion for all living things and respect for other people's property.
- 3.ICR.1.4 Illustrate how to effectively and respectfully express opinions that differ.

4th Grade Healthful Living

- 4.ICR.1.1 Explain the importance of showing respect for self and respect and empathy for others.

5th Grade Healthful Living

- 5.ICR.1.4 Summarize how to solve problems and resolve conflict without avoidance or violence.

6th Grade Healthful Living

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

- 6.ICR.1.1 Classify behaviors as either productive or counterproductive to group functioning.
- 6.ICR.1.2 Implement verbal and non-verbal communication skills that are effective for a variety of purposes and audiences.
- 6.ICR.1.3 Use strategies to communicate care, consideration and respect for others.

9th Grade Healthful Living

- 9.ICR.1.2 Classify negotiation and collaboration skills as helpful or harmful in solving problems or resolving conflicts.
- 9.ICR.1.3 Illustrate strategies for resolving interpersonal conflict without harming self or others.

2nd Grade Physical Education

- PE.2.PR.4.1 Explain the value of working cooperatively in group settings.
- PE.2.PR.4.2 Summarize the benefits of positive social interaction as to make activities more enjoyable.
- PE.2.PR.4.3 Use safe practices when engaging in physical education activities with little or no prompting.

3rd Grade Physical Education

- PE.3.PR.4.1 Use self-control to demonstrate personal responsibility and respect for self and others.
- PE.3.PR.4.2 Use cooperation and communication skills to achieve common goals.
- PE.3.PR.4.3 Explain the importance of working productively with others.

4th Grade Physical Education

- PE.4.PR.4.1 Use self-control through structure, expectations, and engagement to demonstrate personal responsibility and respect for self and others.
- PE.4.PR.4.2 Use cooperation and communication skills to achieve common goals.

5th Grade Physical Education

- PE.5.PR.4.1 Use self-control to work independently in developing responsibility and respect for self and others.
- PE.5.PR.4.2 Use cooperation and communication skills to achieve common goals.

6th Grade Physical Education

- PE.6.PR.4.2 Use well-developed cooperation skills to accomplish group goals in both cooperative and competitive situations.

7th Grade Physical Education

- PE.7.PR.4.2 Contrast between appropriate and inappropriate strategies to communicating ideas and feelings.
- PE.7.PR.4.3 Understand the role of diversity in physical activity respecting limitations and strengths of members of a variety of groups.

8th Grade Physical Education

- PE.8.PR.4.2 Exemplify well-developed cooperation skills to accomplish group goals in both cooperative and competitive situations.

9th Grade Physical Education

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

PE.9.PR.4.1 Implement leadership skills to promote responsibility in self and others.

PE.9.PR.4.2 Select the most appropriate ways of responding and mediate to settle conflicts.

Below is a sampling of the more than 30 challenge and team building events that SEEC has to offer.

All Aboard - This activity can be easy or difficult depending on the cooperative nature of each team member.



Search and Rescue - Listening skills and communication skills are a must in this activity.



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Key Punch - One of the more challenging and fast paced challenge activities.



Mine Field - Seemingly simple, deceptively complex.



Nitro - Teamwork, listening skills and trust are all challenged in this activity. Is there anyone out there who doesn't like swinging on a rope?



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Maze - This event challenges integrity as two of the most used senses are taken away.



Number Line-up - It looks and sounds easy but this event tests the frustration level of even the coolest customers.



Sherpa Walk - Lose one of your most used senses and the trust of your teammates is essential.



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Trolleys - Coordination and teamwork are what this event is all about.



Web - This event is the ultimate test of teamwork and listening skills.



Beam - Another seemingly simple task which tests coordination and teamwork to the fullest.



Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Forest Ecology

Students will participate in a discussion focusing on products made from trees, learn the major parts of a tree and their functions within the tree, and identify tree species by using a dichotomous key. Students will connect with the forest by participating in a nature art activity.

North Carolina Essential Standards Correlations:

3rd Grade Science

3.L.2 Understand how plants survive in their environments.

Remember the function of the following structures as it relates to the survival of plants in their environments:

- Roots - absorb nutrients
- 3.L.2.1 - Stems - provide support
- Leaves - synthesize food
- Flowers - attract pollinators and produce seeds for reproduction.

3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.

5th Grade Science

5.L.2 Understand the interdependence of plants and animals with their ecosystem.

5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).

6th Grade Science

6.L.1 Understand the structures, processes and behaviors of plants that enable them to survive and reproduce.

6.L.1.2 Explain the significance of the processes of photosynthesis, respiration and transpiration to the survival of green plants and other organisms.

6.L.2 Understand the flow of energy through ecosystems and the responses of populations to the biotic and abiotic factors in their environment.

6.L.2.1 Summarize how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within food chains and food webs (terrestrial and aquatic) from producers to consumers to decomposers.

6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight, and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Wetlands Ecology and Identification

From the pileated woodpecker hammering away at the trees to the croaking frogs, SEEC's signature course uses the wetlands as its teacher and discovery as its lesson plan. Through in-depth explorations of our wetlands, participants gain insights into the vital functions that freshwater ecosystems provide.

Participants get down and dirty and join the wonderful world of wetlands from a micro-habitat point of view. After safely collecting and identifying samples of detritus and macro-invertebrates, we will investigate them further on the big screen with the help of identification sheets and our projection microscope.

North Carolina Essential Standards Correlations:

1st Grade Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.
- 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering.)

2nd Grade Science

- 2.L.1.1 Summarize the life cycle of animals: - Birth - Developing into an adult - Reproducing - Aging and death
- 2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

3rd Grade Science

- 3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.

4th Grade Science

- 4.L.1.1 Give examples of changes in an organism's environment that are beneficial to it and some that are harmful.
- 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.

5th Grade Science

- 5.L.2.1 Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, lakes and ponds, forests, and grasslands).
- 5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).
- 5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

6th Grade Science

- 6.L.2.1 Summarize how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within food chains and food webs (terrestrial and aquatic) from producers to consumers to decomposers.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

- 6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.

8th Grade - Science

- 8.E.1.4 Conclude that the good health of humans requires: - Monitoring of the hydrosphere - Water quality standards - Methods of water treatment - Maintaining safe water quality - Stewardship
- 8.L.3.1 Explain how factors such as food, water, shelter and space affect populations in an ecosystem.
- 8.L.3.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including: - Coexistence and cooperation - Competition (predator/prey) - Parasitism - Mutualism

High School Biology

- Bio.2.1.1 Analyze the flow of energy and cycling of matter (water, carbon, nitrogen and oxygen) through ecosystems relating the significance of each to maintaining the health and sustainability of an ecosystem.
- Bio.2.1.2 Analyze the survival and reproductive success of organisms in terms of behavioral, structural and reproductive adaptations.
- Bio.2.1.3 Explain various ways organisms interact with each other (including predation, competition, parasitism, mutualism) and with their environments resulting in stability within ecosystems.
- Bio.2.2.1 Infer how human activities (including population growth, pollution, global warming, burning of fossil fuels, habitat destruction and introduction of nonnative species) may impact the environment.
- Bio.2.2.2 Explain how the use, protection and conservation of natural resources by humans impact the environment from one generation to the next.

High School Earth/Environmental Science

- EEn.2.2.1 Explain the consequences of human activities on the lithosphere (such as mining, deforestation, agriculture, overgrazing, urbanization, and land use) past and present.
- EEn.2.4.2 Evaluate human influences on water quality in North Carolina's river basins, wetlands and tidal environments.
- EEn.2.7.1 Explain how abiotic and biotic factors interact to create the various biomes in North Carolina.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Wilderness Survival

'Prepare for the worst, hope for the best.'

Unless you are Survivor Man or Bear Grylls, most people do not start off their trips expecting a "survival situation." More than likely something has gone wrong and not according to plan. Therefore, in any trip preparation, planning for the worst case scenario is not a bad idea.

Our Wilderness Survival course will take students into the wilderness and get them thinking about extreme survival situations in which they might experience and the methods and techniques for surviving such situations. Techniques such as fire building, shelter building and basic wilderness know-how. The course also emphasizes the importance of teamwork in a survival situation and is an excellent teambuilding exercise.

North Carolina Essential Standards Correlations:

5th Grade Healthful Living

5.ICR.1.4 Summarize how to solve problems and resolve conflict without avoidance or violence.

6th Grade Healthful Living

6.ICR.1.1 Classify behaviors as either productive or counterproductive to group functioning.

9th Grade Healthful Living

9.ICR.1.2 Classify negotiation and collaboration skills as helpful or harmful in solving problems or resolving conflicts.

2nd Grade Physical Education

PE.2.PR.4.1 Explain the value of working cooperatively in group settings.

3rd Grade Physical Education

PE.3.PR.4.2 Use cooperation and communication skills to achieve common goals.

PE.3.PR.4.3 Explain the importance of working productively with others.

4th Grade Physical Education

PE.4.PR.4.2 Use cooperation and communication skills to achieve common goals.

5th Grade Physical Education

PE.5.PR.4.2 Use cooperation and communication skills to achieve common goals.

6th Grade Physical Education

PE.6.PR.4.2 Use well-developed cooperation skills to accomplish group goals in both cooperative and competitive situations.

8th Grade Physical Education

PE.8.PR.4.2 Exemplify well-developed cooperation skills to accomplish group goals in both cooperative and competitive situations.

9th Grade Physical Education

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

PE.9.PR.4.1 Implement leadership skills to promote responsibility in self and others.

Sample Courses

Contact the Summit Environmental Education Center for more information about which classes are currently available.

Piedmont Wildlife

Students will learn what amazing mammals call the Piedmont of North Carolina home, and how these mammals are adapted for survival. This will be accomplished through observations, investigation and classification activities utilizing animal pelts and skulls.

North Carolina Essential Standards Correlations:

1st Grade - Science

- 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
- 1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world
- 1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering.)

4th Grade - Science

- 4.L.1.1 Give examples of changes in an organism's environment that are beneficial to it and some that are harmful.
- 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.
- 4.L.1.4 Explain how differences among animals of the same population sometimes give individuals an advantage in surviving and reproducing in changing habitats.

5th Grade - Science

- 5.L.2.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including:

8th Grade - Science

- 8.L.3.1 Explain how factors such as food, water, shelter and space affect populations in an ecosystem.
- 8.L.3.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including:
 - Coexistence and cooperation
 - Competition (predator/prey)
 - Parasitism
 - Mutualism

High School Biology

- Bio.2.1.2 Analyze the survival and reproductive success of organisms in terms of behavioral, structural, and reproductive adaptations.
- Bio.2.1.3 Explain various ways organisms interact with each other (including predation, competition, parasitism, mutualism) and with their environments resulting in stability within ecosystems.